Fast ATA and Fast ATA-2

Fast ATA—The 100% IDE-compatible hard disc drive interface

that accelerates performance up to 400%.

For more information about Fast ATA, please contact Seagate Technology at 408-438-8111.

Seagate

THE DATA TECHNOLOGY COMPANY

Seagate Technology is a leading independent designer, manufacturer and marketer of data-storage products and components for the computer systems and data-technology industries.

Fast ATA Products

Fast ATA and Fast ATA-2 products are shipping from leading companies such as:

Company Name	Phone
Disc Drives	
Seagate Technology	408-438-8111
Seagate Bulletin Board	408-438-8771
Host Adapters	
Acculogic	714-454-2441
Alpha Research	512-418-0220
Arco Computer Products	305-925-2688
ATronics International Inc.	510-656-8400
CMD	714-454-0800
Data Technology Corp.	408-942-4081
Elitegroup Computer Systems	510-226-7333
Genoa Systems Corp.	408-432-9123
GSI	714-757-1778
Promise Technology Inc.	408-452-1180
Quick Technology Corp.	714-258-4500
TEKRAM Technology	800-556-6218
Tyan Computer Corp.	408-956-8044
Host Adapter Chipsets	
Cirrus Logic	510-623-8300
ATronics International Inc.	510-656-8400
CMD	714-454-0800
Data Technology Corp.	408-942-4081
Promise Technology Inc.	408-452-1180
TEKRAM Technology	800-556-6218
Motherboards	
AMI	404-263-8181
Elitegroup Computer Systems	510-226-7333
Genoa Systems Corp.	408-432-9123
Micronics	510-651-2300
BIOS	
AMI	404-263-8181
Award	415-968-4434
Phoenix Technology	408-452-1985
Microid Research	408-727-6992

Fast ATA—The New Industry-Standard Interface That Is Replacing Standard IDE

With today's multimedia and graphical applications, the need to process, transfer, store and display larger amounts of data has increased dramatically. Computing devices have evolved to meet the challenge with super-fast 486, Pentium and PowerPC processors and equally-fast VL or PCI bus architectures that are capable of data-transfer rates of 132 Mbytes per second. Until recently, however, disc drives have not been designed to take advantage of the tremendous increase in performance of these new machines. Older IDE drives typically trans-ferred data at a slow 4 or 8 Mbytes per second, forcing performance-conscious users to pay more for SCSI solutions.

Fast ATA and Fast ATA-2 are the high-performance evolutions of the old ATA (IDE) disc drive interface. Fast ATA allows data to transfer at up to 13.3 Mbytes per second, and Fast ATA-2 allows data to transfer at up to 16.6 Mbytes per second. These new, high-speed drives are *fully backward-compatible with older IDE-based systems* and cost less to implement than SCSI.

4.1 Mbytes per second
ATA (IDE)

10 Mbytes per second
Fast SCSI-2

13.3 Mbytes per second
Fast ATA

16.6 Mbytes per second
Fast ATA-2

Performance and Productivity Without a High Price

With performance up to four times faster than IDE and up to 60% faster than Fast SCSI-2, you might expect to pay a premium for Seagate Fast ATA and Fast ATA-2 disc drives. Not so. The improved performance is achieved without adding any extra hardware or cost to the drive mechanism.

Fast ATA and Fast ATA-2 are advanced implementations of the industry-standard AT Attachment (ATA) interface that supports data-transfer rates up to 13.3 Mbytes and 16.6 Mbytes per second, respectively, using a standard VL bus-to-ATA or PCI-to-ATA hardware connection. The standard features of Fast ATA and Fast ATA-2 include the full functionality of (and backward compatibility with) standard ATA (IDE) host connections along with these advanced features:

- Programmed I/O (PIO) Mode 3 (up to 11.1 Mbytes per second)
- Multiword direct memory access (DMA) Mode 1 (up to 13.3 Mbytes per second)
- PIO Mode 4 or DMA Mode 2 (up to 16.6 Mbytes per second)
- Multiple block read/write

Fast ATA burst transfer rates up to 13.3 Mbytes per second can be achieved when the system supports PIO mode 3 or DMA mode 1. Fast ATA-2 burst transfer rates up to 16.6 Mbytes per second can be achieved when the system supports PIO mode 4 or DMA mode 2. Fast ATA-capable BIOS and host adapters have been shipping since early 1993.

- Fast ATA maximizes the data-transfer performance of any PC system to accelerate operating systems and applications.
- Fast ATA easily installs into any PC with a standard ATA (IDE) connector.
- Fast ATA is Local Bus-ready to unlock the performance capabilities of VL bus and PCI bus systems.
- Fast ATA products are fully compatible with old IDE and Enhanced IDE hardware.
- Fast ATA is ideal for full-motion video and image-editing applications.
- Fast ATA is faster than Fast SCSI-2 and costs less to integrate.

Fast ATA and Fast ATA-2 Products

Model	Capacity (Mbytes)	Spindle (RPM)	Form-Factor	Average Seek
Fast ATA-2				
Medalist 1080 ST31220A	1,083	4,500	3.5" LP	12
Decathlon 850 ST5850A	850	5,400	3.5", 19 mm	11
Fast ATA				
Medalist 425xe ST3491A	428	3,800	3.5" LP	14
Medalist 340xe ST3391A	341	3,800	3.5" LP	13
Medalist 210xe ST3250A	214	3,800	3.5" LP	14
Marathon 520 ST9655AG	524	3,980	2.5", 19 mm	16
Marathon 455 ST9550AG	455	3,980	2.5", 19 mm	16
Marathon 340 ST9835AG	341	3,980	2.5", 19 mm	16
Marathon 260sl ST9300AG	262.1	3,980	2.5", 12 mm	16
Marathon 210sl ST9240AG	210.4	3,980	2.5", 12 mm	16
Marathon 170sl ST9190AG	171.6	3,980	2.5", 12 mm	16
Marathon 130sl ST9150AG	131	3,980	2.5", 12 mm	16